# A NEW GENUS OF THE SUBFAMILY HEMISPHAERIINAE (HEMIPTERA: FULGOROIDEA: ISSIDAE) FROM CHINA

YALIN ZHANG, YINGLUN WANG, AND YANLI CHE

Key Laboratory of Plant Protection Resources and Pest Management, Ministry of Education, Entomological Museum, Northwest Sci-Tech University of Agriculture and Forestry, Yangling, Shaanxi 712100, China (e-mails: yalinzh@yahoo.com.cn; yinglunw@ nwsuaf.edu.cn)

Abstract.—Choutagus longicephalus, a new genus and new species of Issidae (Hemiptera) are described based on specimens from Hainan and Guangxi, China.

Key Words: Hemiptera, Issidae, Choutagus, new genus, new species, China

The subfamily Hemisphaeriinae was proposed by Melichar in 1906 in the family Issidae. Recently, Gnezdilov (2003b) treated the family Issidae with only the single subfamily Issinae with five tribes including the Hemisphaeriini. However, we continue to use Hemisphaeriinae as a subfamily here. The subfamily is distributed in eastern and southeastern Asia and can be recognized easily by the following: Body hemispherical; clypeus not angulate, on same plane as frons; tegmen generally convex, thick, without claval suture; wing developed, shorter than length of tegmen or rudimentary; and legs not dilated.

Fourteen genera have been included in the Hemisphaeriinae (Metcalf 1958, Fennah 1978, Chan and Yang 1994). Recently, the genus *Mithymna* Stål, 1862, was transferred to the family Nogodinidae (Fennah 1967) and the genus *Pseudohemisphaerius* Melichar, 1906, to the tribe Issini of the Issidae (Gnezdilov 2003a). In the paper, *Choutagus longicephalus*, n. gen., n. sp., from China are described and illustrated.

## Choutagus Zhang, Wang, and Che, new genus

Type species.—*Choutagus longicephalus*, n. sp.

Description.-Body hemispherical. Head (including eyes) distinctly narrower than pronotum. Vertex much longer than broad, more or less triangular, with central and lateral carinae. Ocelli present. Frons with disc finely granulose and slightly elevated, tricarinate. Frontoclypeal suture nearly straight. Clypeus with central and lateral carinae, apparently produced downward. Rostrum long, reaching to metatrochanter. Pronotum narrow with two central pits; centrally, laterally and sublaterally carinate; a row of small pale tubercles along anterior margin, anterior margin distinctly convex, posterior margin nearly truncate. Mesoscutellum more or less triangular, centrally, laterally, and sublaterally carinate with two pits along lateral margin. Tegmen with fore and hind margin more or less parallel, thickly and coarsely reticulate; claval suture absent. Wing well developed, veins distinct and netlike, more than half length of tegmen. Legs relatively long, not dilated, lateral margin of hind tibia with two teeth. Spinulation formula of hind leg 6-11-2, indicating number of spines at apex of hind tibia and hind first and second tarsomeres. Male genitalia symmetrical, aedeagus tubular with two spiniform processes near mid-length.

Remarks.-Choutagus is close to Daru-

*mara* Metcalf, 1952, from Taiwan and *Macrodaruma* Fennah, 1978, from Vietnam, all having a distinctly produced vertex. It differs from *Darumara* by (1) vertex more than three times longer than wide between eyes; (2) frons about three times longer than wide at the frontoclypeal suture; (3) pronotum and mesoscutellum with median, lateral, and sublateral carinae; and (4) wing developed, a little shorter than tegmen. It can be separated from *Macrodaruma* by (1) the vertex tricarinate and (2) the pronotum and mesoscutellum centrally, laterally, and sublaterally carinate.

Etymology.—The genus is named after the famous Chinese entomologist Prof. Chou Io in honor of his great contributions to taxonomy. The gender is masculine.

Distribution.-China (Hainan, Guangxi).

## Choutagus longicephalus Zhang, Wang, and Che, new species (Figs. 1–9)

Description.—Male. length (including tegmen): 7.3–8.3 mm; length of tegmen: 4.2–4.7 mm. Female. length (including tegmen): 7.8–8.5 mm; length of tegmen: 4.5–5.1 mm.

General color in fresh specimens yellowish brown suffused with green (older specimens yellow); carinae yellow; tegmen with a tapering pale yellow band along costal margin from tegula to apical margin before veins and a hazel fascia close to this band.

Vertex narrow and slightly wrinkled, disc slightly convex and more or less triangular,  $0.4 \times$  wider at apex than long in midline. Frons slightly convex and nearly vertical; lateral margins angled at midlength and obliquely narrowed to clypeus,  $2.6 \times$  longer at midline than wide at widest part,  $1.5 \times$ wider at widest part than at base. Pronotum narrow,  $2.0 \times$  wider at widest part than long at midline; 17 central, lateral and sublateral carinae present, anterior margin slightly carinate with 6 indistinct tubercles. Pronotum posteriorly almost straight with 2 pits centrally. Mesoscutellum short and broad, with 9 carinae centrally, laterally, and sublaterally; each side with one pit near middle of lateral margin, twice as wide as long. Tegmen relatively small, twice as long as widest part, fore and hind margins nearly parallel; veins distinct and reticulate. Wings small,  $0.8 \times$  length of tegmen; distinctly reticulate. Hind leg spinulation 6-11-2.

Male genitalia: Anal segment in dorsal view nearly oblong, about  $1.2 \times$  longer than greatest width at middle, lateral margin strongly convex near apex, apical margin strongly convex, basal margin almost straight, ventral margin in profile convex, anal tube situated about in middle. Connective fused with aedeagus. Aedeagus symmetrical, stout, slightly curved downward medially, with lateral, ventral and dorsal lobes. Dorsal lobes in dorsal view bifurcate, reflexed at apex, apical margin rounded. Lateral lobes in lateral view with apex rounded. Ventral lobes in ventral view with apical margin undivided, slightly concave, shorter than dorsal and lateral lobes. Aedeagus with 2 spiniform processes, directed dorsocephalad, shorter than half length of phallobase. In ventral view, phallobase constricted medially. Genital style apical margin wider than median, subtriangular and rounded at ventrocaudal margin, process short and stout, hooked near base, in caudal view inner apical angle incised, dorsal and ventral margins not parallel. Pygofer in profile distinctly longer ventrally than dorsally, dorsocaudal angle slightly produced.

Types.—Holotype:  $\delta$ , China, Hainan Prov., Jianfeng Mountain, 20 May 1983, coll. Zhang Ya-Lin. Paratypes: China, 1  $\delta$ , Guangxi Zhuang Autonomous Region, Pingnan, Yulin, 25 June 1981, coll. He Yan-Dong; 1  $\delta$ , Guangxi Zhuang Autonomous Region, Guilin city, 28 May 1974, coll. Chou Io and Lu Zheng; 1  $\delta$ , 1  $\Im$ , Hainan Prov., Jianfeng Mountain, 15 June 1983, coll. Gu Mao-Bin; 1  $\delta$ , 1  $\Im$ , Hainan Prov., Jianfeng Mountain, 5 July 1981, coll. Liu Yuang-Fu; 2  $\delta$ , 1  $\Im$ , Hainan Prov., Jianfeng Mountain, 20 May 1985, coll. Gu Mao-Bin; 2  $\delta$ , Hainan Prov., Dingan county, 25 July 2002, coll. Che Yan-Li; 2  $\delta$ , Hainan Prov.,



Figs. 1–9. *Choutagus longicephalus*, male. 1, Vertex and thorax, dorsal view. 2, Frons and clypeus. 3, Tegmen. 4, Wing. 5, Male genitalia segment, left side. 6, Anal segment, dorsal view. 7, Aedeagus, dorsal view. 8, Aedeagus, left side. 9, Apex of aedeagus, ventral view.

Maoyang county, 7 August 2002, coll. Wang Zong-Qing; 2  $\Im$ , Guangxi Zhuang Autonomous Region, Shiwan Mountain, 30 November 2001, coll. Wang Zong-Qing; 6  $\Im$ , Hainan Prov., Jianfeng Mountain, 24 August 2002, coll. Che Yan-Li and Wang Zong-Qing.

Holotype and paratypes in the Entomological Museum, Northwest Sci-Tech University of Agriculture and Forestry.

Etymology.—The Latin words "*longi*" and "*cephalus*" refer to the elongate head of this species.

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